



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,948	09/20/2005	Michael John Watchorn	TEBL4	6001
6980	7590	12/10/2009		
TROUTMAN SANDERS LLP			EXAMINER	
BANK OF AMERICA PLAZA			SINGH, SUNIL	
600 PEACHTREE STREET, N.E.				
SUITE 5200			ART UNIT	PAPER NUMBER
ATLANTA, GA 30308-2216			3672	
			NOTIFICATION DATE	DELIVERY MODE
			12/10/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jim.schutz@troutmansanders.com
patents@troutmansanders.com
ellen.walters@troutmansanders.com

Office Action Summary	Application No.	Applicant(s)	
	10/549,948	WATCHORN, MICHAEL JOHN	
	Examiner	Art Unit	
	Sunil Singh	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 13 October 2009.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 17-36 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 17-36 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17-18,20-25, 27-28,33,34,35,36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faber (US 6745714) in view of Moody (US 5860379) and Ozaki et al. (US 6408780).

Faber discloses a deployable apparatus: the apparatus having a length dimension and a width dimension, the length dimension being greater than the width dimension and the apparatus being configured so that, in use, the length dimension is generally parallel to the predominant wave direction, the apparatus comprising: at least one a buoyant or semi-buoyant upper surface member having an upper surface (top members in Figure 1) and a lower surface and being disposed in use at or near the water surface; and an array of shaped drag inducing elements (bottom members depicted in Figs. 1,2) disposed adjacent the lower surface. The upper surface member comprises a plurality of flexibly linked buoyant or semi-buoyant sections (see col. 2 lines 20-25). A plurality of flexible fluid retaining structures disposed thereon (42,26,30, see Figs. 1). The flexible fluid retaining structures comprise a network grid of pipes or tubes. The fluid is maintained in the flexible structures under pressure (46,see col. 2 line 50+). At least

one pump (46) for supplying fluid to said flexible fluid retaining structures. Leading inclined end (see Fig. 5).

Faber discloses the invention substantially as claimed. However, Faber is silent about the elements being collapsible or compressible. Further, Faber lacks a leading end that remains inclined downwardly when in use. Moody teaches elements being collapsible or compressible (6a,b,10a,b,12a,b see Figs. 1a,b,2). Ozaki et al. teaches a leading end that remains inclined downwardly when in use (see Fig. 3c). It would have been considered obvious to one of ordinary skill in the art to modify Faber to include elements that are collapsible or compressible as taught by Moody in order to enhance storage. Further, it would have been considered obvious to modify Faber to have the leading end remain inclined downwardly when in use as taught by Ozaki et al. since such a modification facilitates loading and unloading of the sea vessel and dissipate wave energy.

3. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faber in view of Moody and Ozaki et al.

Faber (as modified above) discloses the invention except including a single sheet of flexible buoyant or semi-buoyant material. It would have been considered obvious to one of ordinary skill in the art to further modify the (above modified) Faber by substituting a single sheet of flexible buoyant or semi-buoyant material for the upper surface as disclosed by the (once modified) Faber since it has been held that forming in one piece an article which has formerly been formed in multiple pieces and put together

involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164 (1993).

4. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faber in view of Moody and Ozaki et al. as applied to claim 17 above, and further in view of Hochschild, III (US 6592416).

Faber (as modified above) discloses the invention substantially as claimed. However, the (as modified above) Faber is silent about including a flexible drogue. Hochschild III teaches a flexible drogue(20). It would have been considered obvious to one of ordinary skill in the art to further modify the (above modified) Faber to include drogue as taught by Hochschild since such a modification improves stability.

5. Claims 31,32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manuel (US 3608316) in view of Faber and Moody and Ozaki et al. Manuel discloses a system for deploying and recovering an apparatus comprising a deployment vessel, a storage device on the vessel for the apparatus and means for paying out and recovering the apparatus (see Fig. 8). Manuel discloses the invention substantially as claimed. However, Manuel is silent about deploying and recovering an apparatus as called for in claim 17. Faber (as modified) by Moody and Ozaki et al. teaches the apparatus as called for in claim 17 (see discussion above). It would have been considered obvious to one ordinary skill in the art to modify Manuel by substituting the apparatus as taught by Faber (as modified by Moody and Ozaki et al.) for the apparatus disclosed by Manuel since such a modification provides a boat lift away from shore.

Art Unit: 3672

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faber (US 6745714) in view of Moody (US 5860379) and Streichenberger (US 4872782).

Faber discloses a deployable apparatus: the apparatus having a length dimension and a width dimension, the length dimension being greater than the width dimension and the apparatus being configured so that, in use, the length dimension is generally parallel to the predominant wave direction, the apparatus comprising: at least one a buoyant or semi-buoyant upper surface member having an upper surface (top members in Figure 1) and a lower surface and being disposed in use at or near the water surface; and an array of shaped drag inducing elements (bottom members depicted in Figs. 1,2) disposed adjacent the lower surface. The upper surface member comprises a plurality of flexibly linked buoyant or semi-buoyant sections (see col. 2 lines 20-25). A plurality of flexible fluid retaining structures disposed thereon (42,26,30, see Figs. 1). The flexible fluid retaining structures comprise a network grid of pipes or tubes. The fluid is maintained in the flexible structures under pressure (46,see col. 2 line 50+). At least one pump (46) for supplying fluid to said flexible fluid retaining structures. Leading inclined end (see Fig. 5).

Faber discloses the invention substantially as claimed. However, Faber is silent about the elements being collapsible or compressible. Further, Faber lack bristles or fronds as drag inducing elements. Moody teaches elements being collapsible or compressible (6a,b,10a,b,12a,b see Figs. 1a,b,2). Streichenberger teaches bristles or fronds as drag inducing elements (see Figs. 1,8). It would have been considered obvious to one of ordinary skill in the art to modify Faber to include elements that are collapsible or

compressible as taught by Moody in order to enhance storage. Further, it would have been considered obvious to one of ordinary skill in the art to modify Faber to include the bristles/fronds as taught by Streichenberger in order to absorb wave energy and generate biomass growth.

7. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faber in view of Moody and Streichenberger as applied to claim 29 above, and further in view of Ozaki et al.

Faber (as modified above) discloses the invention substantially as claimed. However, Faber lacks a leading end that remains inclined downwardly when in use. Ozaki et al. teaches a leading end that remains inclined downwardly when in use (see Fig. 3c). It would have been considered obvious to one of ordinary skill in the art to further modify the (above modified) Faber to have the leading end remain inclined downwardly when in use as taught by Ozaki et al. since such a modification facilitates loading and unloading of the sea vessel and dissipate wave energy.

Response to Arguments

8. Applicant's arguments with respect to claims 17 and 29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/
Primary Examiner, Art Unit 3672

Sunil Singh
Primary Examiner
Art Unit 3672

SS

12/4/09